

REMARKS

Claims 1-6 are pending in this application. In the Office Action, the Examiner rejected the claims as follows. Claims 1 and 2 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,905,473 (Taenzer). Claims 3-5 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,184,833 B1 (Tran). Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tran in view of Taenzer.

The claims of the present invention are drawn to a portable communication terminal which can reduce the intensity of electromagnetic fields acting about a user's head and to achieve a reduction in SAR (specific absorption rate) by adjusting the respective phases Φ_1 and Φ_2 of antenna currents $ia1$ and $ia2$ using phase controllers 34 and 35 in order to allow those phases which have a phase difference of, for example, 180, as shown in FIG. 14A.

Regarding the Examiner's rejection of independent Claim 1, the Examiner states that Taenzer teaches all the elements of Claim 1. It is respectfully submitted that the Examiner is incorrect. Taenzer teaches a reflective antenna located near an active receiving antenna, is used to change the energy at the receiving antenna. Taenzer also discloses active control of the reflective elements where the term "reflective element" refers to an element that re-radiates radio frequency (RF) energy, and further teaches the position of a reflective element relative to the active receiving antenna is unimportant so long as a portion of the re-radiated energy is picked up by the active receiving antenna

and the phase with which the re-radiated energy is received is controllable. In other words, Taenzer teaches the use of reflective elements and controlling the phase of a reflected signal. As taught by Taenzer, the reflective elements are not driven elements (i.e., fed elements or active), but rather are reflective elements which merely re-radiate (i.e., reflect) RF energy. This is similar to a mirror re-radiating incoming light. The mirror does not generate the light but, rather, re-radiates (i.e., reflects) the light. In contrast, Claim 1 includes the recitation of phase control means for feeding power to each of the dipole antennas and for controlling respective phases of powers to be fed to the dipole antennas, which is neither taught nor suggested by Taenzer. Accordingly, it is respectfully requested that the Examiner's rejection under 35 U.S.C. §102(e) of Claim 1 be withdrawn.

Regarding the Examiner's rejection of independent Claim 3, the Examiner states that Tran teaches every limitation of Claim 3. It is respectfully submitted that the Examiner is incorrect. Tran teaches a dual strip antenna mounted near an upper portion of the housing adjacent to a circuit board 1402 (e.g., see FIGs. 14A and 14B). Tran further teaches that the dual strip antenna is mounted between ridges 1420 and 1422 and is mounted above the circuit board 1402. In other words, the antenna 400 is separated from the circuit board 1402 by the ridge 1422 which is mounted between the antenna 400 and the circuit board 1402. Moreover, although Taenzer discloses a dual strip antenna may be mounted behind other elements such as speakers, an antenna mounted behind a speaker implies being mounted between the speaker and the circuit board. Furthermore, with reference to FIGs. 12 and 13, Tran discloses the measured field patterns of Antenna

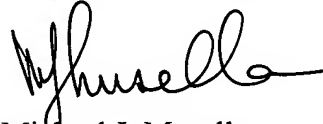
400 are omnidirectional. In contrast, Claim 3 includes the recitation of a dipole antenna arranged on a surface of a printed circuit board included in the terminal, the surface being opposite to a surface of the printed circuit board to which a speaker is mounted, which is neither taught nor suggested by Tran. Accordingly, it is respectfully requested that the Examiner's rejection under 35 U.S.C. §102(e) of Claim 3 be withdrawn.

Regarding the Examiner's rejection of independent Claim 6, the Examiner states that Tran discloses all the limitations of Claim 6 except that the antenna is a set of dipole antennas that are fed the same power through phase control means, which the Examiner asserts is taught by Taenzer. It is respectfully submitted that the Examiner is incorrect. Tran teaches a dual strip antenna that includes first and second conductive strips, each made from a conductive material, and further discloses that it is essential that the antennas for such wireless communication devices have an approximately omnidirectional radiation pattern. This omnidirectional radiation pattern is shown in FIGs. 12 and 13 and teaches away from the present invention. Tran also teaches it is not intended for use as a dual-band antenna with each strip acting as an independent antenna radiator, which further teaches away from the present invention. As discussed above, Taenzer teaches the use of reflective elements. In contrast, Claim 6, includes the recitation of phase control means for feeding power to each of the dipole antennas and for controlling respective phases of powers to be fed to the dipole antennas, which is neither taught nor suggested by Taenzer or Tran or the combination thereof. Accordingly, it is respectfully requested, that the rejection under 35 U.S.C. §103(a) be withdrawn.

Independent Claims 1, 3, and 6 are believed to be in condition for allowance. Without conceding the patentability per se of dependent Claims 2 and 4-5, these are likewise believed to be allowable by virtue of their dependence on their respective amended independent claims. Accordingly, reconsideration and withdrawal of the rejections of dependent Claims 2 and 4-5 is respectfully requested.

Accordingly, all of the claims pending in the Application, namely, Claims 1-6, are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Musella", with a stylized flourish at the end.

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